WE CLAIM:

1. A digital video recorder comprising:

(a) a unique ID;

(b) a hard disk drive (HDD) for storing a plurality of encrypted video programs and an encrypted file system, the encrypted file system comprising a plurality of encrypted file system entries for decrypting the plurality of encrypted video programs;

(c) host circuitry for interfacing with the HDD, the host circuitry comprising a cryptography facility for encrypting plaintext file system entries into the encrypted file system entries stored on the HDD, and for decrypting the encrypted file system entries read from the HDD into plaintext file system entries, the cryptography facility comprising:

a pseudo-random sequence generator, responsive to the unique ID, for generating a pseudo-random sequence;

an encoder for combining the pseudo-random sequence with the plaintext file system entries to generate the encrypted file system entries stored on the HDD; and

a decoder for combining the pseudo-random sequence with the encrypted file system entries read from the HDD to generate the plaintext file system entries.

2. The digital video recorder as recited in claim 1, wherein:

(a) the plaintext file system entry comprises a plaintext key for encrypting a plaintext video program into an encrypted video program stored on the HDD; and

(b) the cryptography facility:

uses the plaintext key to encrypt the plaintext video program into an encrypted video program stored on the HDD; and

encrypts the plaintext key into an encrypted key stored in one of the encrypted file system entries on the HDD.

3. The digital video recorder as recited in claim 1, wherein:

(a) the encrypted file system entry comprises an encrypted key for decrypting an encrypted video program read from the HDD into a plaintext video program; and

(b) the cryptography facility:

decrypts the encrypted key read from the HDD into a plaintext key; and

decrypts the encrypted video program read from the HDD using the plaintext key.

4. The digital video recorder as recited in claim 2, wherein the encoder combines the pseudo-random sequence with the plaintext video program to generate the encrypted video program stored on the HDD.

5. The digital video recorder as recited in claim 3, wherein the decoder combines the pseudo-random sequence with the encrypted video program read from the HDD to generate the plaintext video program.

6. The digital video recorder as recited in claim 1, wherein the pseudo-random sequence generator comprises a programmable file system (FS) polynomial for generating the pseudo-random sequence.

7. The digital video recorder as recited in claim 6, wherein the programmable FS polynomial is programmed with coefficient values.

8. The digital video recorder as recited in claim 7, further comprising a coefficient value generator for generating the coefficient values from the unique ID.

9. The digital video recorder as recited in claim 7, wherein the coefficient value generator comprises a programmable algorithm for generating the coefficient values from the unique ID.

10. The digital video recorder as recited in claim 9, wherein the host circuitry further

comprises interface circuitry for receiving command information from an external entity to program the programmable algorithm.

11. The digital video recorder as recited in claim 6, wherein the programmable FS polynomial is programmed with a seed value.

12. The digital video recorder as recited in claim 11, further comprising a seed value generator for generating the seed value from the unique ID.

13. The digital video recorder as recited in claim 12, wherein the seed value generator comprises a programmable algorithm for generating the seed value from the unique ID.

14. The digital video recorder as recited in claim 13, wherein the host circuitry further comprises interface circuitry for receiving command information from an external entity to program the programmable algorithm.

15. The digital video recorder as recited in claim 6, wherein the programmable FS polynomial comprises a programmable linear feedback shift register.

16. The digital video recorder as recited in claim 8, wherein the coefficient value generator comprises:

(a) a coefficient table comprising a plurality of table entries, each table entry comprising coefficient values; and

(b) an index generator, responsive to the unique ID, for generating an index into the coefficient table.

17. The digital video recorder as recited in claim 12, wherein the seed value generator comprises:

(a) a seed table comprising a plurality of table entries, each table entry comprising a seed value; and

(b) an index generator, responsive to the unique ID, for generating an index into the seed table.

18. The digital video recorder as recited in claim 2, wherein:

(a) the plaintext key comprises a plurality of segment keys; and

(b) each segment key for encrypting a segment of the plaintext video program.

19. The digital video recorder as recited in claim 2, wherein:

(c) a plurality of segment keys are generated from the plaintext key; and

(d) each segment key for encrypting a segment of the plaintext video program.

20. A method of processing video programs in a digital video recorder comprising host circuitry and a hard disk drive (HDD) for storing encrypted video programs and encrypted file system entries for use in decrypting the encrypted video programs, the method comprising the steps of:

(a) generating a pseudo-random sequence from a unique ID associated with the host circuitry;

(b) combining the pseudo-random sequence with a plaintext file system entry to generate one of the encrypted file system entries;

(c) storing the encrypted file system entry on the HDD;

(d) reading the encrypted file system entry from the HDD; and

(e) combining the pseudo-random sequence with the encrypted file system entry read from the HDD to generate the plaintext file system entry.

21. The method of processing video programs as recited in claim 20, wherein the plaintext file system entry comprises a plaintext key for encrypting a plaintext video program into an encrypted video program stored on the HDD, further comprising the steps of:

(a) using the plaintext key to encrypt the plaintext video program into an encrypted video program;

(b) storing the encrypted video program on the HDD;

(c) encrypting the plaintext key into an encrypted key; and

(d) storing the encrypted key in one of the encrypted file system entries on the HDD.

22. The method of processing video programs as recited in claim 20, wherein the encrypted file system entry comprises an encrypted key for decrypting an encrypted video program read from the HDD into a plaintext video program, further comprising the steps of:

(a) reading the encrypted key from the HDD;

(b) decrypting the encrypted key into a plaintext key;

(c) reading the encrypted video program from the HDD; and

(d) decrypting the encrypted video program using the plaintext key.

23. The method of processing video programs as recited in claim 21, wherein the step of encrypting the plaintext video program comprises the step of combining the pseudo-random sequence with the plaintext video program.

24. The method of processing video programs as recited in claim 22, wherein the step of decrypting the encrypted video program comprises the step of combining the pseudo-random sequence with the encrypted video program.

25. The method of processing video programs as recited in claim 20, wherein the pseudo-random sequence is generated using a programmable file system (FS) polynomial.

26. The method of processing video programs as recited in claim 25, further comprising the step of programming the programmable FS polynomial with coefficient values.

27. The method of processing video programs as recited in claim 26, further comprising the step of generating the coefficient values from the unique ID.

28. The method of processing video programs as recited in claim 27, further comprising the step of generating the coefficient values from the unique ID using a programmable algorithm.

29. The method of processing video programs as recited in claim 28, further comprising the step of receiving command information from an external entity to program the programmable algorithm.

30. The method of processing video programs as recited in claim 25, further comprising the step of programming the programmable FS polynomial with a seed value.

31. The method of processing video programs as recited in claim 30, further comprising the

step of generating the seed value from the unique ID.

32. The method of processing video programs as recited in claim 31, further comprising the step of generating the seed value from the unique ID using a programmable algorithm.

33. The method of processing video programs as recited in claim 32, further comprising the step of receiving command information from an external entity to program the programmable algorithm.

34. The method of processing video programs as recited in claim 25, wherein the programmable FS polynomial comprises a programmable linear feedback shift register.

35. The method of processing video programs as recited in claim 27, wherein the step of generating the coefficient values comprises the step of generating an index from the unique ID, the index for indexing a coefficient table comprising a plurality of table entries, each table entry comprising coefficient values.

36. The method of processing video programs as recited in claim 31, wherein the step of generating the seed value comprises the step of generating an index from the unique ID, the index for indexing a seed table comprising a plurality of table entries, each table entry comprising a seed value.

37. The method of processing video programs as recited in claim 21, wherein the plaintext key comprises a plurality of segment keys, further comprising the step of encrypting segments of the plaintext video program using respective segment keys.

38. The method of processing video programs as recited in claim 21, further comprising the steps of:

(a) generating a plurality of segment keys from the plaintext key; and

(b) encrypting segments of the plaintext video program using respective segment keys.